

**Freshwater Beach Inspection
Annual Report
Summer Sampling 2010**



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2010 Public Bathing Beach Inspection Program Freshwater Beaches

In 2010, freshwater beaches were inspected by the Public Bathing Beach Inspection Program from June 21 to September 3. During that time, 151 public beaches were inspected at least three times. An additional 7 beaches were only inspected twice during the summer because either the weather prevented sampling or the beach manager requested sampling be halted for the summer. Three new beaches on Emerald Lake in Hillsborough were added this season. Additionally, 76 beaches at juvenile camps were inspected once during the summer. There were a total of 652 beach inspections during 2010. Of the 652 inspections, there were 158 initial inspections, 309 subsequent inspections, 71 advisory inspections, 24 safety inspections, and 90 cyanobacteria inspections. Fifty-seven advisories were posted at 47 beaches due to elevated *E. coli* levels above the state standard of 88 counts per 100 milliliters (Table 1). Although bacteria advisories were issued at 43 beaches in 2009, only 15 of the beaches were under advisories in both years. In 2010, eight beaches were posted for elevated bacteria more than once. Five of those 8 beaches also had at least one advisory in 2009.

Beach operators were able to remove the advisory signs when subsequent tests showed reduced *E. coli* levels. Thirteen pre-emptive rainfall advisories were issued at Ahern State Park, six less than in 2009 reflecting the lower rainfall totals in 2010.

The summer of 2010 was warmer and slightly drier than previous summers. June's average temperature, 66.1°F, was 1.2 degrees warmer than normal, and the total rainfall for the month was 2.79 inches, just 0.31 inches less than the normal monthly rainfall of 3.1 inches. July was also warmer and drier than previous years. The average temperature for July of 73.8°F, was 3.8 degrees warmer than average, and with 1.28 inches of rain was two-fifths of the average of 3.37 inches of rainfall. August was warmer than mean monthly temperatures and continued the trend of a drier than average month. The average August temperature was 69.6°F, 1.4 degree higher than normal. The rainfall for August, 2.76 inches, was slightly lower than average, 3.21 inches. More than half of the beaches with an advisory in 2010, (32 beaches), did not have advisories in 2009. Decreased rainfall in 2010 indicates that the higher fecal bacteria readings at beaches were due to factors other than runoff from the watershed. In total, 58 beach advisories were posted in 2010, only 2 less than in 2009.

The New Hampshire Division of Parks and Recreation requested that the beach program sample all beaches in 2010 so Clough, Lake Tarleton, and Forest Lake State Parks were returned to the sampling routine.

The presence of cyanobacteria at freshwater beaches resulted in 10 advisories posted at 9 beaches in 2010, down from 15 postings in 2009 (Table 2). Three advisories were posted for less than a week. Four of the postings were for eight to twelve days. One beach, Camp Kettleford, had a cyanobacteria advisory posted for 22 days. Pearly Pond Beach in Rindge had two advisories posted, each for about three weeks. Of the 13 beaches with cyanobacteria advisories in 2009, only two, Robinson Pond and Pearly Pond, had repeat advisories in 2010. Robinson Pond, Hudson, had only one bloom in 2010 that lasted for three days instead of 14 days as in 2009. Neither French Pond in

Henniker nor York Pond in Berlin was posted in 2010, unlike in 2008 & 2009 when both were posted for several months. French Pond is still inspected regularly and no significant blooms were observed or reported during the summer. York Pond, however, was not inspected since the camp near by was not open in 2010. A bloom may have occurred but no instances were brought to the attention of program staff.

The lake warning for cyanobacteria developed in the summer of 2008 to alert lake users of cyanobacteria blooms without designated beaches or for areas of a lake away from the designated beach was again successful in 2010. Twelve cyanobacteria warnings were issued last summer (Table 3). Lakes with cyanobacteria warnings were re-inspected weekly through August. Lake Monomonac, Locke Lake and Willand Pond all had warnings in both 2009 & 2010.

The Beach Inspection Program was busy again during the summer of 2010. Many staff members shared the responsibility of sampling freshwater beaches this summer since no single intern was dedicated to the program. Although it was a staffing challenge, most of the beaches were sampled three times this summer. Hopefully, the beach inspection program will continue in 2011.

Goals accomplished during the summer of 2010:

1. All beaches were inspected for compliance with state rule signage requirements. Over 400 signs were delivered so managers could post signage prominently at 50 beaches. The signs indicate whether lifeguards and safety equipment are available and where the closest public phone is located.
2. The website was updated to provide more information about the sampling program for Beach Managers. A frequently asked questions section was added to the website and a brochure targeted to beach managers was published and distributed.
3. In an effort to improve advisory communication between DES and beach managers after hours and on weekends, after hour phone numbers were added or updated for 35 of 468 active contacts.
4. Three more designated beaches were added to the Beach Inspection Program.

Goals to accomplish for 2011:

1. Work with the information technology staff to add more specific information to the beach website so the public can find more information on individual beaches and their advisory history.
2. Continue to improve advisory communication between DES and beach managers after hours and on weekends by collecting more after hour phone numbers for active contacts.
3. Work with interested parties to add more designated beaches to the Beach Inspection Program.

Table 1. *E. coli* advisories issued for New Hampshire Lakes in 2010. Advisories issued when a single sample was over 158 cts/100ml of water or two samples were over 88 cts/100ml of water. Beach names in **BOLD** had multiple advisories in 2010. (#) indicates the number of advisories in 2009. (*) indicates advisory removed at the end of the swimming season.

Beach Name	Town	Sample Date	Post Start Date	Post End Date	<i>E. coli</i> (cts/100ml)			Total Days Posted
					LF	CR	RT	
Robinson Pond Town Beach (1)	Hudson	6/15/10	6/16/10	6/26/10	>400	320	180	10
Wawbeek Assc. Beach	Tuftsboro	6/21/10	6/22/10	6/24/10	99		170	2
Mill Pond	Ossipee	6/23/10	6/24/10	6/29/10	120		130	5
Cobbett's Pond Town Beach	Windham	6/25/10	6/26/10	6/29/10	56		188	3
Camp Lincoln	Kingston	6/25/10	6/26/10	6/29/10	180		128	3
Moose Brook State Park (1)	Gorham	6/28/10	6/29/10	7/1/10	>400		>400	2
Moose Brook Town Park	Randolph	6/28/10	6/29/10	7/1/10	>400		340	2
Tuttle Brook Twin Mountain	Carroll	6/28/10	6/29/10	7/3/10	92		130	4
Weirs Beach	Laconia	6/29/10	6/30/10	7/2/10	50	>400	82	2
Legace TB Webster Lake	Franklin	6/30/10	7/1/10	7/8/10	130	100	146	7
Northwood Lake Town Beach	Northwood	6/30/10	7/1/10	7/3/10	>400		230	2
Great Pond Park Assoc.	Kingston	6/30/10	7/1/10	7/3/10	140			2
Bartlett TB (1)	Laconia	7/1/10	7/2/10	7/7/10	2	>400	140	5
Crystal Lake TB	Gilmanton	7/6/10	7/7/10	7/13/10	130	70	220	6
FB Argue Rec Area (1)	Pittsfield	7/6/10	7/7/10	7/9/10	160	92	98	2
Hedgehog Pond	Salem	7/6/10	7/7/10	8/7/10	>400		>400	31
Arlington Pond	Salem	7/6/10	7/7/10	7/10/10	>400		>400	3
Millen Pond	Washington	7/12/10	7/13/10	7/15/10	>400	360	220	2
1st Beach on New Pond	Canterbury	7/14/10	7/14/10	8/13/10		620		30
Beards Brook TB (1)	Hillsborough	7/15/10	7/16/10	8/18/10	>400		>400	33
Manahan Park Beach (1)	Hillsborough	7/15/10	7/16/10	7/20/10	76	>400	110	4
Robinson Pond Town Beach (1)	Hudson	7/16/10	7/17/10	7/22/10	>400	>400	>400	5
Libby Town Pool	Gorham	7/19/10	7/20/10	7/22/10	196	20	3	2
Moose Brook State Park (1)	Gorham	7/19/10	7/20/10	7/22/10	>400		62	2
Cobbett's Pond Town Beach	Windham	7/19/10	7/20/10	7/23/10	174		210	3
White Lake State Park	Tamworth	7/20/10	7/21/10	7/23/10	290	40	14	2
Wellington State Park	Bristol	7/23/10	7/24/10	7/27/10	180	18	8	3
Cobbett's Pond Town Beach	Windham	7/26/10	7/27/10	7/30/10	>400		260	3
Lake WinnisquamTB	Sanbornton	7/27/10	7/28/10	7/30/10	>400		12	2
Opechee Park Cove (1)	Laconia	7/27/10	7/28/10	9/13/10*	280	>400	>400	47
Weirs Beach	Laconia	7/27/10	7/28/10	8/13/10	10	230	210	16
Ellacoya RV Park	Gilford	7/27/10	7/28/10	7/30/10		180		2
Pawtuckaway State Park (4)	Nottingham	7/28/10	7/29/10	7/31/10	88	52	360	2
Griffin Town Beach (1)	Franklin	7/28/10	7/29/10	7/31/10	>400	26	>400	2
Lake Wentworth State Park	Wolfeboro	7/30/10	7/31/10	8/3/10	194	114	36	3
Silver Lake State Park (1)	Hollis	7/30/10	7/31/10	8/5/10	124	350	208	5

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Beach Name	Town	Sample Date	Post Start Date	Post End Date	<i>E. coli</i> (cts/100ml)			Total Days Posted
					LF	CR	RT	
Second Street Beach (1)	Salem	8/3/10	8/4/10	8/7/10	190		78	3
Millen Pond	Washington	8/5/10	8/6/10	8/10/10	6	>400	85	4
Mill Pond (1)	Washington	8/5/10	8/6/10	8/10/10	>400		>400	4
Kimball Pond	Hopkinton	8/5/10	8/6/10	8/10/10	56		190	4
Richardson Park Beach	Swanzey	8/6/10	8/7/10	8/13/10	240	280	112	6
Pleasant Pond	Henniker	8/6/10	8/7/10	8/12/10	4		310	5
Chase Park Town Beach	Weare	8/6/10	8/7/10	8/10/10	4	128	300	3
Franconia Notch State Park	Franconia	8/11/10	8/12/10	8/14/10	210	100	40	2
Robinson Pond Town Beach (1)	Hudson	8/13/10	8/14/10	8/17/10	170	88	180	3
Gilford TB on Winnepesaukee	Gilford	8/17/10	8/18/10	8/20/10	88	60	>400	2
Camp Otter (1)	Salem	8/18/10	8/19/10	8/22/10	>400		>400	3
Opechee Park Point (1)	Laconia	8/19/10	8/20/10	9/13/10*	194	66	10	24
Northwood Lake Town Beach	Northwood	8/23/10	8/24/10	9/8/10*	200		150	15
Lucas Pond (1)	Northwood	8/23/10	8/24/10	8/27/10	>400		>400	3
Griffin Town Beach (1)	Franklin	8/25/10	8/26/10	8/31/10	>400	8	2	5
Zephyr Lake TB	Greenfield	8/31/10	9/1/10	9/13/10*	>400		250	12
Glines Park	Northfield	9/2/10	9/3/10	9/8/10	130		>400	5
Post Pond Chase Park	Lyme	9/2/10	9/3/10	9/8/10	>400		240	5
Manahan Park Beach (1)	Hillsborough	9/3/10	9/4/10	9/13/10*	120	350	38	9

Table 2: Cyanobacteria advisory notices issued for New Hampshire Beaches in 2010.

Beach	Town	Dominant Cyanobacteria	Date Posted	Date Removed	Total Days Posted
Pearly Pond	Rindge	<i>Anabaena</i>	5/25/10	6/21/10	27
			7/12/10	8/2/10	21
White Lake State Park Beach	Tamworth	<i>Anabaena circinalis</i>	6/22/10	6/23/10	1
Elm Brook Park Beach	Hopkinton	<i>Oscillatoria</i>	7/12/10	7/20/10	8
Robinson Pond Town Beach	Hudson	<i>Oscillatoria</i>	7/13/10	7/16/10	3
Camp Kettleford Beach	Bedford	<i>Oscillatoria</i>	7/13/10	8/4/10	22
Duncan Lake Town Beach	Ossipee	<i>Oscillatoria</i>	7/21/10	8/2/10	12
Long Pond Town Beach	Pelham	<i>Anabaena</i>	8/17/10	8/27/10	10
Canaan Street Lake Beach	Canaan	<i>Anabaena</i>	9/2/10	9/3/10	1
Surry Mountain Lake Beach	Surry	Examined by ACOE	9/2/10	9/30/10	28

Table 3: Cyanobacteria warnings issued for New Hampshire lakes in 2010.

Lake	Town	Dominant Cyanobacteria	Date Posted	Date Unposted	Total Days Posted
Angle Pond	Sandown	<i>Anabaena</i>	5/25/2010	6/2/2010	8
Locke Lake	Barnstead	<i>Anabaena</i>	5/25/2010	6/2/2010	8
Willand Pond	Dover	<i>Anabaena</i>	5/25/2010	6/17/2010	23
Lake Monomonac	Rindge	<i>Anabaena</i>	5/27/2010	6/2/2010	6
Rock Pond	Windham	<i>Anabaena</i>	6/15/2010	6/22/2010	7
Showell Pond	Sandown	<i>Oscillatoria</i>	6/16/2010	7/2/2010	16
Nippo Pond	Barrington	<i>Anabaena</i>	6/17/2010	6/24/2010	7
Forest Lake	Winchester	<i>Oscillatoria</i>	7/16/2010	8/2/2010	17
Sebbins Pond	Bedford	<i>Oscillatoria</i>	7/21/2010	8/4/2010	14
Pawtuckaway Lake	Nottingham	<i>Oscillatoria</i>	8/11/2010	8/18/2010	7
Big Island Pond	Atkinson	<i>Anabaena</i>	8/18/2010	8/27/2010	9
Province Lake	Effingham	<i>Anabaena</i>	9/3/2010	9/15/2010	12